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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/646,763	10/24/2000	Michel Lanquetin	GEI-078	8985
47888 7590 10/06/2008 HEDMAN & COSTIGAN P.C. 1185 AVENUE OF THE AMERICAS NEW YORK, NY 10036				
EXAMINER				
HUI, SAN MING R				
ART UNIT		PAPER NUMBER		
1617				
MAIL DATE		DELIVERY MODE		
10/06/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

09/646,763

**Applicant(s)**

LANQUETIN ET AL.

**Examiner**

San-ming Hui

**Art Unit**

1617

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-33 is/are pending in the application.
- 4a) Of the above claim(s) 19, 21, 23, 28 and 30-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18, 20, 22, 24-27 and 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election of the invention of Group I, claims 18, 20, 22, 24-27, and 29, in the reply filed on March 11, 2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 19, 21, 23, 28, and 30-33 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on March 11, 2008.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18, 20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saunal et al. (WO96/30000, English equivalent: USPN 6,010,716 is also provided), reference of record, and Maillo et al. (EP 0 785 211 A1) in view of Winters et al. (WO95/30409), reference of record.

Saunal et al. teaches a transdermal topical formulation employing a solvent, absorption promoting agent, an active, comprising the steroid, nomegestrol, and a film-

forming agent. Saunal et al. teaches the composition may contain 0.1 to 20.0% of nomegestrol (See col. 5, line 28). Saunal et al. also teaches the solvent or solubilizing agent may be ethanol or isopropanol (See col. 7, line 13). Saunal et al. also teaches that the weight ratio of the ethanol may be 44% to 84.9% (See particularly col. 7, line 41-46). The film-forming agent is a cellulose derivative, hydroxypropylmethylcellulose, hydroxypropylmethylcellulose succinate acetate, and ethylcellulose. (See col.3, line 58-63). The film-forming agent of Saunal et al. can also be PVP VA, a known polyvinylpyrrolidone derivative (See col. 3, line 67).

Maillo et al. teaches a gel formulation for topical use containing progesterone compounds encompassed nomegestrol, with 20 to 40% of ethyl alcohol, 1 to 4% of polyethylene glycol, and water (See page 9, line 41; also page 18, line 25-40, Example 22). Maillo et al. also teaches nomegestrol as useful as hormone replacement agents, or treating symptoms associated with estrogen/progesterone imbalance (See page 6, line 50 bridging page 7, first paragraph).

The references do not expressly teach a method of employing the topical nomegestrol composition to treat progesterone deficiency in a host. The references do not expressly teach the amount of nomegestrol as 0.05 to 1% in the composition. The references do not expressly teach film-forming agent as methacrylates, and cellulose. The references do not expressly teach a plasticizing agent such as Labrasol<sup>®</sup>, a preferred C<sub>8</sub>/C<sub>10</sub> polyoxyethylene glycosyl glyceride herein. The references do not expressly teach the ratio of water, ethanol, propylene glycol, and Labrasol in preferred the solvent system herein.

Winters et al. teaches a topical formulation of the steroid, 19-nor progesterone for systemic delivery of active. The formulation has a solvent which may include alcohols (See page 4, line 1-2), film-forming agent such as methacrylates, and cellulose (See page 4, line 8-11), a plasticizing agent such as Labrasol (See page. 4, line 18), and a penetration enhancer.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the amount of nomegestrol herein and a film-forming agent such as methacrylates and cellulose, and Labrasol into the nomegestrol topical composition of Saunal et al. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust the ratio of water, ethanol, propylene glycol, and Labrasol in preferred the solvent system herein.

The employment of nomegestrol as an active agent in a topical pharmaceutical composition with carrier materials herein is motivated because these carrier materials, such as methacrylates and cellulose, and Labrasol, are known pharmaceutical excipients, known to be useful in substantially similar topical pharmaceutical compositions comprising the same and similar active ingredients. The incorporation of known carrier materials into a pharmaceutical composition containing a known active is considered within the skill of the artisan.

The optimization of result effect parameters (e.g., amounts of ingredients) is obvious as being within the skill of the artisan, absent evidence to the contrary. Amounts of composition ingredients employed herein are substantially similar to the prior art.

The instant composition containing norgestrel would be reasonably expected to be similarly useful to raise progesterone levels in a host, regardless of their status as being menopausal or premenopausal, and treating progesterone deficiency thereby, especially in view of the teachings of Maillo et al.

Claims 24-27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saunal et al. and Maillo et al. in view of Winters et al. as applied to claims 1, 3, 5-8, 11, 12, 14-15, and 18 above, and further in view of Merck Index (Budavari et al., editor, Merck Index, 12th ed., 1996: page 889-890, Compound 5232), Eibl et al. (USPN 5,290,769), and Remington's Pharmaceutical Sciences (Gennaro et al., Remington's Pharmaceutical Sciences, 18th ed., 1990: page 1305), reference of record.

The combination of Saunal et al., Maillo et al., and Winters et al. does not expressly teach the employment of isopropylidene glycerol, copolymer of methacrylic acid and ethyl acrylate, and carbomer in the topical norgestrel composition. The combination of Saunal et al., Maillo et al., and Winters et al. does not expressly teach the ratio of propylene glycol and isopropylidene glycerol.

The Merck Index teaches that isopropylidene glycerol may be used as a solubilizing or plasticizing agent in pharmaceutical compositions (See page 889-890, Compound 5232).

Eibl et al. teaches the use of copolymer of methacrylic acid and ethyl acrylate as pharmaceutical auxiliary agents in topical formulation (See col 5, line 66 and col. 6, line 19-20).

Remington's Pharmaceutical Sciences teaches that carbomer is useful as a gelling and emulsifying agent in pharmaceutical compositions (See page 1305, col. 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate isopropylideneglycerol, copolymer of methacrylic acid and ethyl acrylate, and carbomer into the topical nomegestrol composition.

One of ordinary skill in the art would have been motivated to incorporate isopropylideneglycerol, copolymer of methacrylic acid and ethyl acrylate, and carbomer into the topical nomegestrol composition since isopropylideneglycerol, copolymer of methacrylic acid and ethyl acrylate, and carbomer are known as agents for topical pharmaceutical excipients. Incorporating any known excipients, including isopropylideneglycerol, copolymer of methacrylic acid and ethyl acrylate, and carbomer, into the topical nomegestrol composition would be considered as being within the purview of skilled artisan. Furthermore, the optimization of the amount ratio between propylene glycol and isopropylidene glycerol would be obvious as considered being within the purview of skilled artisan.

No claims are allowed.

### ***Response to Arguments***

Applicant's arguments with respect to claims 18, 20, 22, 24-27, and 29 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to San-ming Hui whose telephone number is (571) 272-0626. The examiner can normally be reached on Mon - Fri from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, PhD., can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

San-ming Hui  
Primary Examiner  
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